DRAFT ENVIRONMENTAL ASSESSMENT
FOR
MT HAGGIN WMA HABITAT PROJECT #4

November 2017

Montana Fish, Wildlife & Parks

Draft Environmental Assessment
For
Mt Haggin WMA Habitat Project #4
November 2017

1.0: PURPOSE OF AND NEED FOR ACTION

1.1 Proposed Action

The Department of Fish, Wildlife & Parks (FWP) proposes to treat approximately 1,500 acres on the Mt Haggin Wildlife Management Area (WMA) for conifer encroachment. The total gross project area is 6,600 acres delineated into 6 treatment units, ranging in size from 65 to 646 acres. Conifer would be removed from grasslands and sagebrush shrublands, aspen stands and willow-dominated riparian areas. Untreated areas would consist of mature forest stands and grass/shrublands, aspen and riparian areas not invaded by conifer expansion. This would mainly be a non-commercial harvest with a small component of commercial harvest of merchantable timber removed from aspen stands. Conifer to be removed includes primarily 30-40-year-old lodgepole pine and Douglas-fir. Treatment in non-commercial areas would include hand-removal methods, with slash being either lopped and scattered or piled and burned. Commercial cuts would include the use of heavy machinery and temporary skid trails. No new roads would be created for this project.

1.2 Need for the Action

Mt. Haggin WMA was purchased in 1976 for its values to wildlife and habitat. Because of its large intact acreage (almost 60,000 acres) that spans the continental divide, it provides both summer and winter range to several big game species including mule deer, elk, moose and antelope. Photo comparisons from the 1970's to 2010's reveal a large amount of conifer expansion into sagebrush shrublands, grasslands, aspen and riparian areas on the WMA (Figures 1-2). Loss of these important habitat types are occurring throughout SW Montana, mainly due to fire suppression, climatic conditions, and other factors. If left unchecked, conifer expansion could impact the big game populations that depend on sagebrush, grasslands, aspen and riparian areas on Mt Haggin WMA for calving/fawning, summer weight gain, and winter survival, along with other wildlife species such as songbirds and small mammals. The WMA plays a critical role in the annual life stages of many big game populations as well as numerous species of small mammals and songbirds. This proposal would ensure critical habitats remain functional and productive into the next fifty years.

Figure 1: 1977 to 2009 aerial photo comparison of the Duhame Treatment Area 1 on Mt. Haggin WMA.

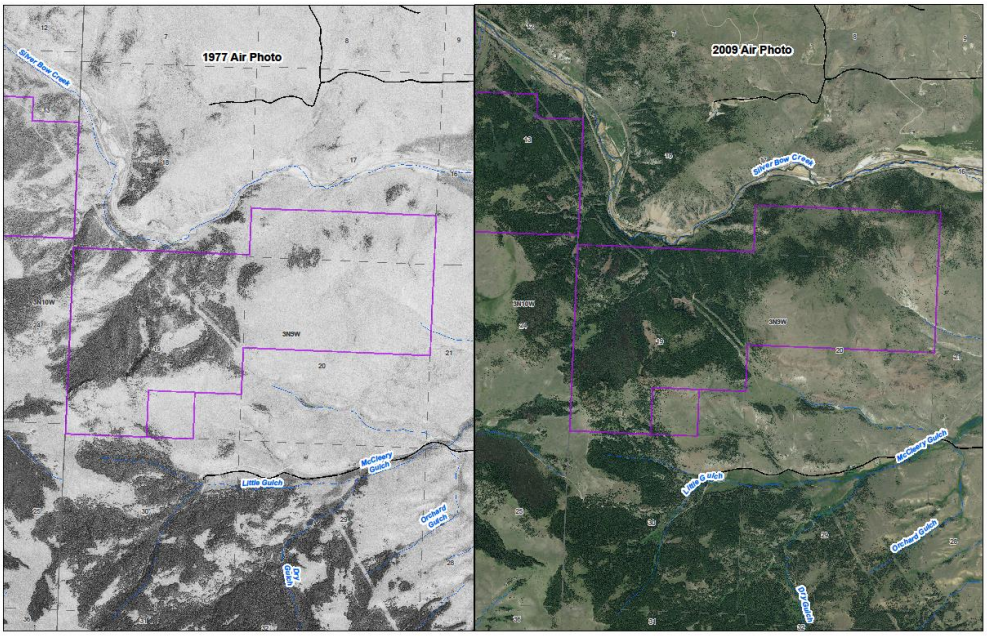
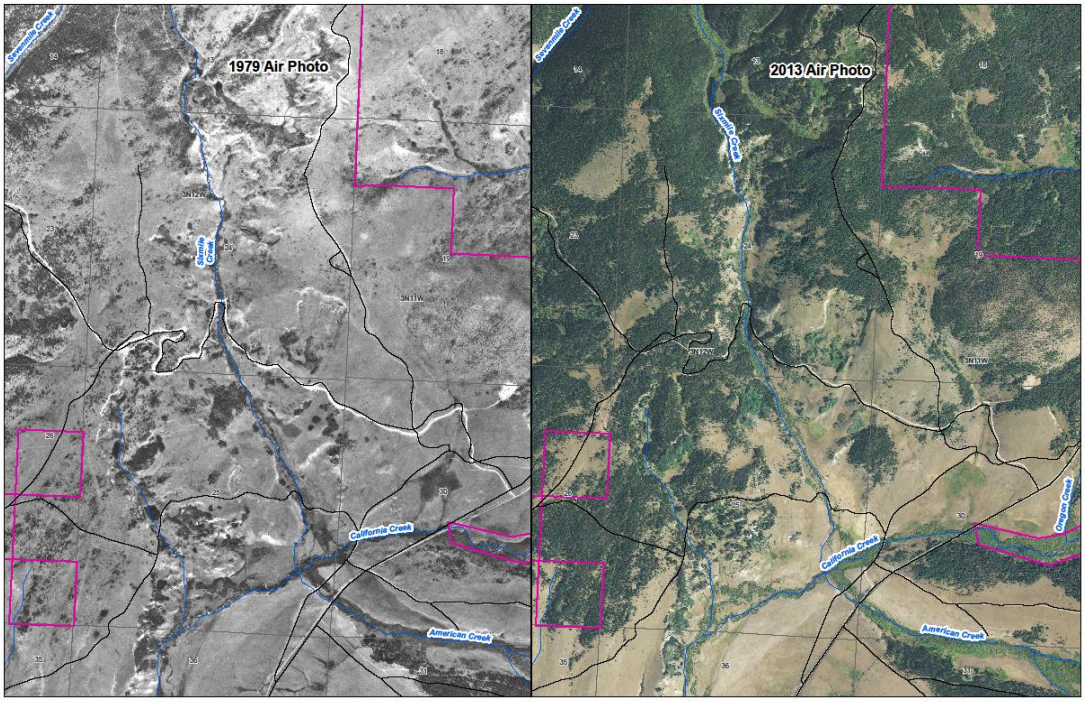


Figure 2: 1979 to 2013 aerial photo comparison of Sixmile Creek Treatment Area 6 on Mt. Haggin WMA.



1.3 Location of Proposed Action

Mt. Haggin WMA is located 3 miles south of Anaconda, MT (Figure 3). It spans Deer Lodge and Silver Bow counties. It is in Deer/Elk Hunting Districts 319 and 341. The delineation of the six treatment units are shown in Figures 4-6.

Figure 3: Location of the proposed action on Mt. Haggin WMA (indicated by yellow stars).

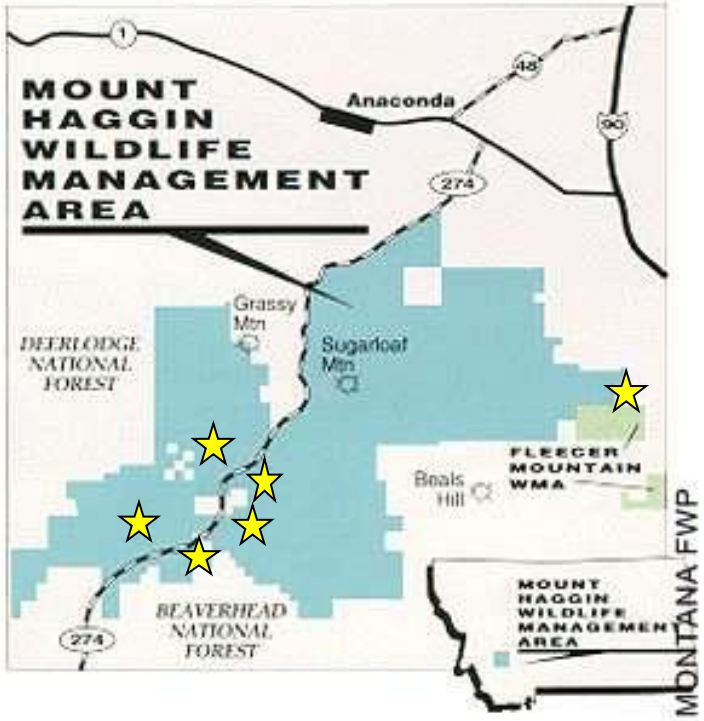


Figure 4: Treatment Area 1 of Mt Haggin WMA Habitat Project #4.

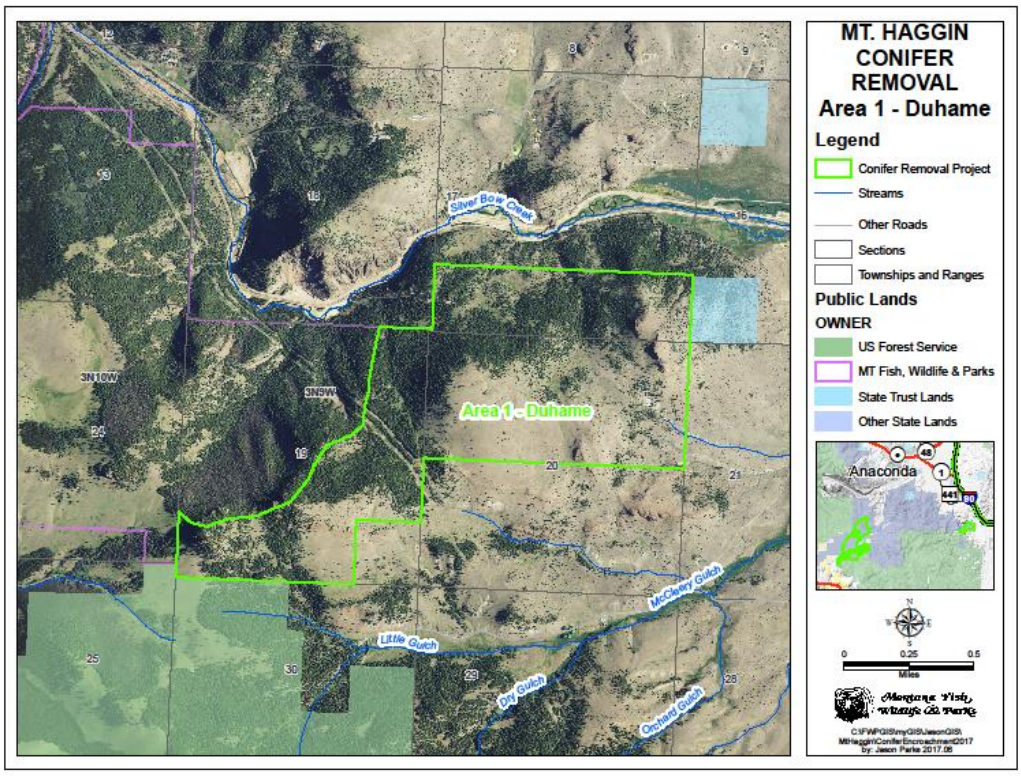


Figure 5: Treatment Areas 2-4 of Mt. Haggin Habitat Project #4.

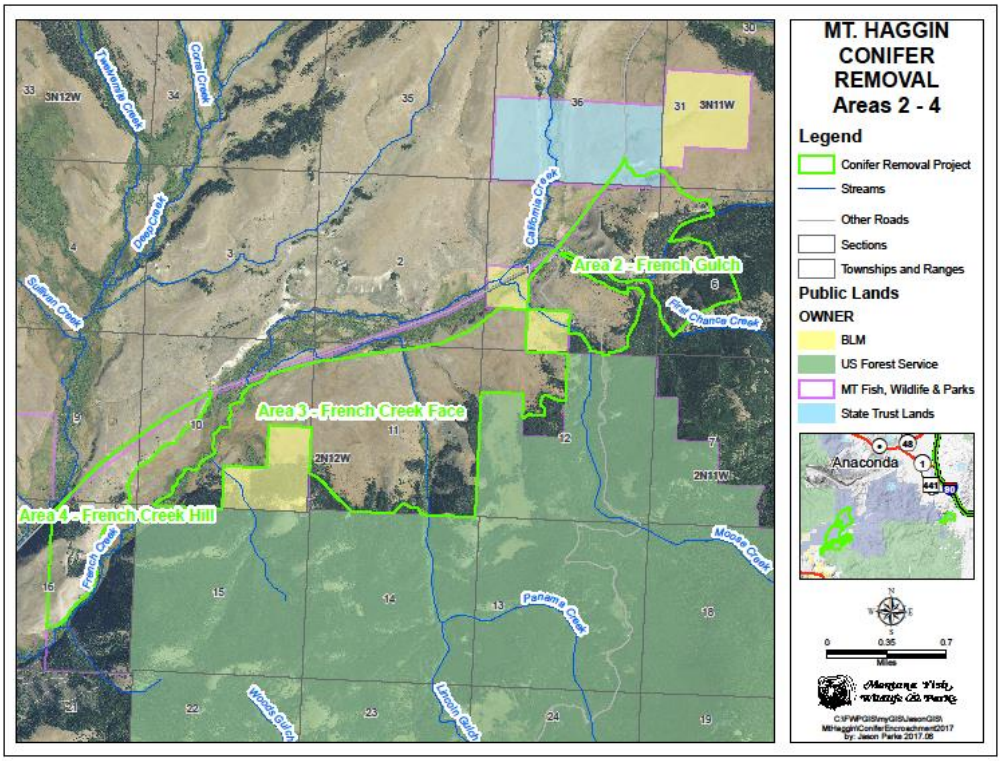
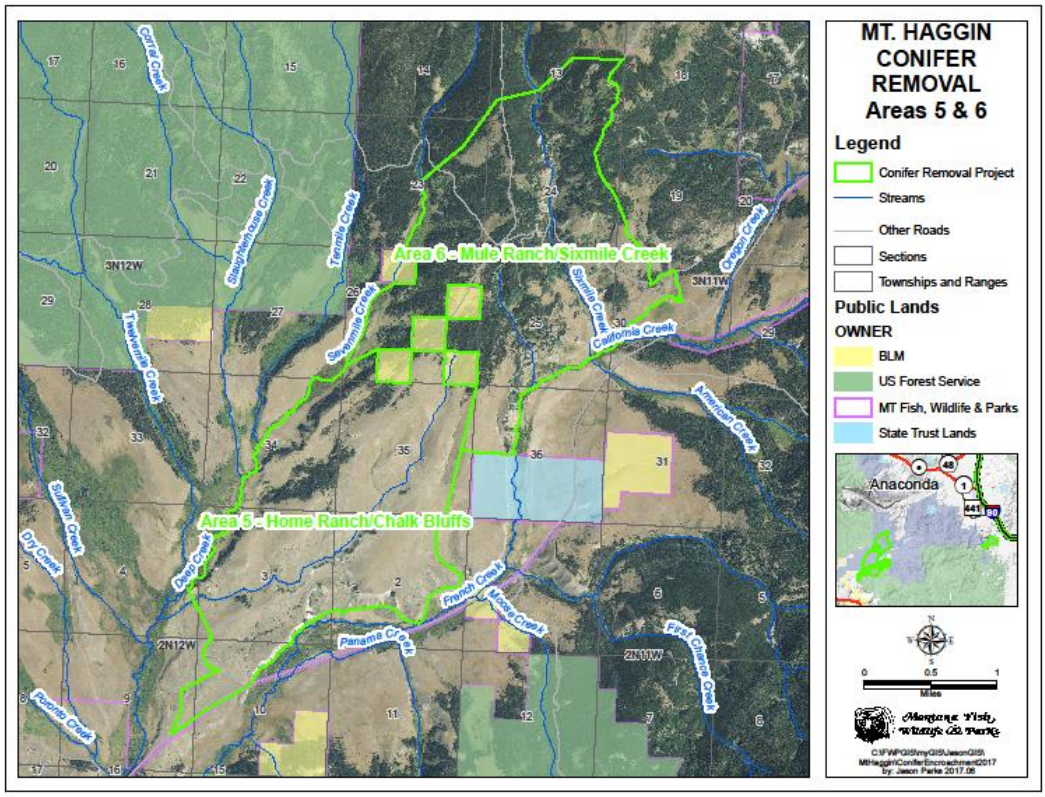


Figure 6: Treatment Areas 5 and 6 of Mt. Haggin Habitat Project #4.



1.4 Objective of Proposed Action

1.4.1 Objective 1: Prevent loss of sagebrush, grassland, aspen and riparian habitat by removing competing conifers.

1.4.2 Objective 2: Increase year- round forage and browse available to elk, mule deer, moose, pronghorn and ruffed grouse by removing conifers that compete with forb, grass, and deciduous shrub and tree species.

1.5 Relevant Plans and Authority

1.5.1 Section 87-1-201 (iv), Montana Code Annotated (MCA) requires FWP to address fire mitigation and wildlife habitat enhancement, giving priority to forested lands of 50 contiguous acres or more in any state park, fishing access site, or wildlife management area under the department's jurisdiction.

1.5.2 Section 87-1-201, MCA gives FWP the authority to protect, enhance, and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. Habitat improvements as proposed in this assessment would enhance native plant communities so that they continue to support game and other wildlife species for the public to enjoy.

1.5.3 Montana Fish, Wildlife & Parks Commission Deer Management Policy (1998), penned and adopted by the then FWP Commission in 1998, emphasizes protection and enhancement of mule deer habitats as one of three key components to managing for the long-term welfare of Montana's deer resource. This project as proposed would enhance approximately 700 acres of important mule deer winter range and 600 acres of mule deer summer range.

1.5.4 Montana Statewide Elk Management Plan (2005). One goal specified in FWP's 2005 Elk Management Plan promotes improvement of elk habitat by maintaining vegetative diversity. The proposed project would work toward this goal by promoting retention of aspen, sagebrush, and grassland stands through the removal of encroaching conifer on both winter and summer range.

1.5.5 Montana Dept. of Fish, Wildlife and Parks State Wildlife Action Plan (2015)
Under this conservation strategy, animals have been assigned levels of Species of Greatest Conservation Need (SGCN). SGCN2 indicates species at risk, in part, due to limited or declining habitat, making it vulnerable to global extinction or extirpation in Montana. SGCN3 indicates species potentially at risk because of limited or declining habitat. Table 1 lists species of greatest conservation need that occur or potentially can occur within the Mt. Haggin WMA project area.

Table 1: Species of greatest conservation need within the Mt. Haggin WMA project area.

Common Name	Scientific Name	SGCN
Wolverine	*Gulo gulo*	3
Fisher	*Pekania pennanti*	3
Northern Goshawk	*Accipiter gentiles*	2
Great Blue Heron	*Ardea herodias*	3
Cassin's Finch	*Haemorhous cassinii*	3
Black Rosy-Finch	*Leucosticte atrata*	2
Clark's Nutcracker	*Nucifraga columbiana*	3
Long-billed Curlew	*Numenius americanus*	3
Green-tailed Towhee	*Pipilo chlorurus*	3
Great Gray Owl	*Strix nebulosa*	3
Westslope Cutthroat Trout	*Oncorhynchus clarkii lewisi*	2
Gillette's Checkerspot	*Euphydryas gillettii*	2

1.6 Overlapping Jurisdiction

1.6.1 Name of Agency and Responsibility

a. Montana State Historic Preservation Office – Cultural and Historic Resources
b. Silver Bow County – Weed Management
c. Deer Lodge County – Weed Management

1.7 Decision

Based on the review of the project as well as public comment, FWP's Region 3 Supervisor would decide whether to approve this habitat improvement project for Mt. Haggin WMA.

2.0: ALTERNATIVES

2.1 Alternative A (Proposed Action): Remove expanding Douglas fir and lodgepole pine from sagebrush, grassland, aspen and riparian communities within Mt. Haggin WMA.

Site-specific project maps are shown in Figures 4, 5 and 6. Treatment area details are as follows:

Area 1 – Duhame

- Gross area – 740 acres
- Estimated actual area to be treated – approximately 50% of the area (370 acres) would have conifers (primarily 30- to 40-year-old Douglas-fir) removed from grasslands and sagebrush shrublands to enhance forage species on elk and mule deer winter range. Approximately 10 acres of aspen stands would have conifers removed. The untreated areas would consist of mature forest stands, rock/cliff areas, and grass/shrublands not invaded by conifer expansion.

Area 2 – French Gulch

- Gross area – 473 acres
- Estimated actual area to be treated – approximately 30% of the area (142 acres) would have conifers (primarily 30- to 40-year-old lodgepole pine) removed from grasslands and sagebrush shrublands, aspen stands, and willow-dominated riparian areas to big game summer range and moose winter range. The

untreated areas would consist of mature forest stands and grass/shrublands, aspen, and riparian areas not invaded by conifer expansion.
- Includes approximately 19 acres of DNRC State Trust Lands within the WMA boundary.

Area 3 – French Creek Face
- Gross area – 906 acres
- Estimated actual area to be treated – approximately 10% of the area (91 acres) would have conifers (primarily 30- to 40-year-old lodgepole pine) removed from grasslands and sagebrush shrublands to enhance mule deer, antelope and elk summer range. The untreated areas would consist of mature forest stands and grass/shrublands not invaded by conifer expansion.

Area 4 – French Creek Hill
- Gross area – 217 acres
- Estimated actual area to be treated – approximately 30% of the area (65 acres) would have conifers (primarily 30- to 40-year-old lodgepole pine) removed from grasslands and sagebrush shrublands to enhance mule deer, antelope and elk summer range. The untreated areas would consist of mature forest stands and grass/shrublands not invaded by conifer expansion.

Area 5 – Home Ranch/Chalk Bluffs
- Gross area – 2,086 acres
- Estimated actual area to be treated – approximately 10% of the area (209 acres) would have conifers (primarily 30- to 40-year-old lodgepole pine) removed from grasslands and sagebrush shrublands to enhance mule deer, antelope and elk summer range. The untreated areas would consist of mature forest stands; grass/shrublands and riparian areas not invaded by conifer expansion; and to retain visual screening around dispersed campsites.

Area 6 – Mule Ranch/Sixmile Creek
- Gross area – 2,152 acres
- Estimated actual area to be treated – approximately 30% of the area (646 acres) would have conifers (primarily 30- to 40-year-old lodgepole pine) removed from grasslands and sagebrush shrublands and aspen stands to enhance big game summer range and moose winter range. The untreated areas would consist of mature forest stands; grass/shrublands and riparian areas not invaded by conifer expansion; and to retain visual screening around dispersed campsites.

Treatment Descriptions

Conifer removal (approximately 1,500 acres): Remove all conifer trees (except juniper) less than 10 inches DBH in grasslands and sagebrush shrublands. Portions of dense, closed canopy stands would be flagged out to leave for cover and security. Others would be thinned to a crown spacing of 8 to 12 feet to break up contiguous tree canopies to reduce the risk of stand replacement fire as well as allowing sunlight to reach the ground to promote grass and woody browse production. Tree felling would occur between May 1 and September 30. Work would occur in one area at a time to minimize disturbance to wildlife and recreationists. Work would be completed by contracted hand crews. Off-road ATV travel would be required in some areas to transport tools and equipment. Light slash accumulations would be lopped and scattered. Dense slash accumulations, exceeding a depth of 12 inches, would be piled and burned during the late-fall/winter. Operations would be suspended during wet conditions when the ground is most susceptible to disturbance or if conditions are extremely dry and fire danger is high.

Aspen enhancement (approximately 10 acres): Remove all conifers except old, remnant trees (approximately 2 per acre) within and 100 feet around aspen stands. Ground-based timber harvest would be used to remove merchantable Douglas fir and would require access through neighboring property to facilitate logging and hauling. Timber harvest would occur between May 15 and September 30. Operations would be suspended during wet

conditions when the ground is most susceptible to disturbance or if conditions are extremely dry and fire danger is high. Work would be completed by contracted logger. Sub-merchantable trees and slash would be piled along the exterior of aspen stands to reduce herbivory. Once aspen regeneration escapes browse height, piles would be burned.

Access to all project areas will be from existing primitive roads that merge with Montana Highway 274, locally known as the Mill Creek Highway or from the German Gulch Road. No new roads will be constructed.

FWP's forester will supervise the proposed project in conjunction with the Butte Area wildlife biologist.

Funding for this project would be provided by FWP's Forestry Account, Natural Resource Damage Program, Rocky Mountain Elk Foundation, Mule Deer Foundation and other partners.

The project is not expected to facilitate increased sediment erosion. However, adherence to Montana's Forestry Best Management Practices (BMPs) and Streamside Management Zone (SMZ) law would further reduce potential impacts to water quality.

All guidelines and recommendations for managing noxious weeds in FWP's Integrated Noxious Weed Management Plan (2008) would be adhered to. These include:

- Surveying the proposed project area prior to tree removal to identify noxious weeds, mapping infestations, and controlling them by a combination of mechanical, biological, or chemical methods. The project area would be revisited indefinitely as part of annual WMA weed management.
- Power washing any vehicles and equipment prior to its arrival on the WMA.
- Seeding any disturbed areas with a native seed mixture appropriate for the area immediately upon completion.

FWP staff will continue to actively manage noxious weeds across the proposed project areas as part of regular WMA management.

2.2 Alternative B (No Action): Implement no conifer removal and status quo is maintained on the WMA. FWP would not conduct any conifer removal projects on Mt. Haggin WMA under this alternative. FWP would continue noxious weed management activities within the WMA.

Douglas fir and lodgepole pine succession would continue unless natural fire disturbance occurred. Conifer succession will continue to fragment and replace sagebrush, grassland, aspen and riparian habitat. This will reduce the amount of year-round forage and browse available, including critical elk and mule deer winter range, to elk, mule deer, pronghorn, and moose and nesting habitat for numerous songbird species.

3.0: AFFECTED ENVIRONMENT

3.1 Description of Relevant Pre-Existing Factors

The proposed project area has been identified as critical big game winter and summer range since at least the early 1970s. The Fish & Game Department (precursor to FWP) purchased Mt. Haggin WMA in 1976 because of its large contiguous acreage spanning the continental divide that provided both winter range and summer range to elk, mule deer, and moose. In 2006 FWP purchased the 1,745-acre Duhame property adjacent to Mt. Haggin WMA with funding from the Natural Resource Damage Program. Over the past century, fire suppression and climatic conditions have allowed Douglas-fir and lodgepole pine to expand into sagebrush, grassland, aspen and riparian communities.

3.2 Description of Relevant Affected Resources

3.2.1 Soil & Geologic

The project area is located east of the Anaconda-Pintler Range along the western edge of the Boulder batholith. The Anaconda-Pintler Range contains ancient Proterozoic upper Belt sedimentary rocks, Cretaceous granite (associated with the Boulder batholith), Tertiary volcanic, and Quaternary glacier sediments. These rocks are the sources of the Quaternary stream sediments that lie on top of Tertiary basin

fill which create the flat riparian area and associated hills in the southwestern portion of the WMA. Paleozoic limestone/dolomite rocks dominate the surface geology along the Continental Divide in the south-central area of the WMA

Soils on Mt. Haggin WMA are primarily either Mollisols or Alfisols. Mollisols generally form under a grassland cover in semi-arid to semi-humid areas with temperate climates, while Alfisols form under forest cover in semi-arid to humid areas. Entisols are also present in the project area. Entisols form quickly, are relatively unaltered from their parent material and have minimal organic matter. Most of the soil on Mt. Haggin WMA is loamy while a few smaller areas are more sandy or clayey in texture.

3.2.2 Air & Noise

Mt. Haggin WMA is surrounded by U.S. Forest Service and private lands. The area receives minimal human use during the summer and heavy use during the autumn hunting seasons. The portion of the WMA on the west side of the Continental Divide (Treatment Area 1) is closed to all human use from December 2 until May 15 to provide security to wintering wildlife. That portion of the WMA, east of the divide (Treatment Areas 2-6) are open year-round to public recreation, including snowmobiling and cross-country skiing in the winter. That portion of the WMA where Treatment Areas 2-6 are located are grazed by cattle from June 15 to Oct 5 annually. Air quality is high and noise levels are limited to the occasional vehicle, snow machine, gunshot, or livestock activity.

3.2.3 Water & Fisheries

Six creeks occur within the proposed project area: California Creek, American Creek, French Creek, Moose Creek, Sixmile Creek, and Sevenmile Creek. All of these streams are located within the Big Hole River watershed. The native fish community in these streams historically consisted of westslope cutthroat trout, Arctic grayling, mountain whitefish, and mottled sculpin. The current fish community in Little American Creek consists of eastern brook trout and mottled sculpin. California and Little California Creeks contain eastern brook trout, rainbow trout, mountain whitefish, and mottled sculpin. They may also contain Arctic grayling, brown trout, and white and longnose suckers because of similar gradient and stream characteristics to nearby streams that maintain these species. French Creek contains mottled sculpin and brook trout although surveys conducted up until the late 1990's also found Arctic grayling in this system. Western pearlshell mussels, a species of concern, are also present in California Creek.

3.2.4 Vegetation

Mt. Haggin WMA is a mosaic of grassland, sagebrush, aspen, and conifer communities transected by riparian willow communities. The dominant conifer in Treatment Area 1, located at lower elevation, is Douglas fir with some Rocky Mountain juniper mixed in. Douglas fir forests are dry with very little undergrowth. Lodgepole pine is the dominant conifer in Treatment Areas 2-6. Because of past logging that occurred in the early 1900's and again in the 1970's- 80's, lodgepole stands are predominantly mid-seral stage. Aspen woodlands are comprised mainly of pole-sized trees with a dense understory of small trees. Sagebrush stands are intact and healthy with multiple age classes represented. Grasses in this area are primarily bluebunch wheatgrass, prairie junegrass, and Idaho fescue. The forb community is diverse. Lack of wildfire and climatic conditions have facilitated expansion of conifer stands into shrub, grassland and riparian areas over the past several decades.

3.2.5 Wildlife

Mt. Haggin WMA was established in 1976 in part to provide year-round habitat for wildlife emphasizing elk, moose, and mule deer. Other species that are known to use the management area seasonally or occasionally include antelope, white-tailed deer, black bear, wolf, coyote, mountain lion, grizzly bear, bobcat, beaver, pine marten, wolverine, over 200 documented bird species, a variety of amphibians and small mammals.

The portion of the WMA east of the Continental Divide provides birthing and summer range to elk, mule deer and antelope while that portion of the WMA west of the divide provides critical mule deer and elk winter range. Moose occur year-round throughout Mt. Haggin WMA.

3.2.6 Aesthetics

Mt. Haggin WMA offers a diverse natural landscape of native vegetation in a large tract of undeveloped land. The WMA offers many spectacular views of the Pintler Mountains as well as close-up opportunities to observe historical homesteader, mining, and logger cabins and dwellings.

3.2.7 Cultural & Historic

Portions of Mt. Haggin WMA have been affected by the mining and logging industries in the late 19th and 20th centuries. Some remnants of these activities, such as flumes, trestles, roads, and cabins remain scattered throughout the drainages where the proposed project is to take place. There are, additionally, several homesteader cabins and outbuildings that are located throughout the WMA. An inventory of the cultural resources found on the WMA has been documented by Newell (1982) and Wood (1990). Evidence of the presence of ancient peoples using the area also remains in the form of lithic scatter throughout the WMA.

3.2.8 Recreation

Mt. Haggin WMA provides public recreational opportunities such as hunting, hiking, fishing, camping, trapping, snowmobiling, cross-country skiing and wildlife viewing. The portion of the WMA west of the Continental Divide is closed to public recreation Dec 2 – May 15 to provide security for wintering wildlife. That portion of the WMA east of the divide is open for year-round public use.

3.2.9 Health Risks/Hazards

There are inherent risks associated with tree-felling activities. Burning of slash piles also pose inherent risks.

3.2.10 Community Resources

County Road 274, commonly known as the Mill Creek Highway, is in close proximity to the proposed treatment areas.

4.0: ENVIRONMENTAL CONSEQUENCES

4.1 Description of Relevant Affected Resources

4.1.1 Soil & Geologic

Predicted Consequences of Alternative A

Tree removal is expected to occur during the summer and fall when the ground is snow-free and dry. Work would not be conducted when conditions are wet. Off-road travel with ATVs would occur in the project area to transport tools, equipment, and personnel. In areas of non-commercial harvest, trees would be lopped and scattered which would cause minimal soil disturbance and compaction. Large equipment would be used for commercial timber harvest for aspen enhancement in Treatment Area 1. In these areas, a short-term effect caused by mechanical equipment to cut and transport trees to landings may lead to some soil instability. Ground disturbance will be mitigated by utilizing existing roads, careful planning of skid trail locations, limiting cutting to slopes of 40% or less, avoiding wet areas, utilizing appropriate logging systems, using rubber-tired skidders, and avoiding areas with thin and sensitive soils.

Landings and areas of slash accumulation are subject to soil compaction. To mitigate these effects, landings will be located where hardened sites currently exist such as parking areas, old roadways, or other already compacted sites. Existing roads will be used to transport material.

Any substantially disturbed areas will be reseeded with native grasses and forbs to reduce new erosion patterns from becoming established and moving sediment into nearby creeks. The reseeding of disturbed areas additionally will decrease establishment of noxious weeds into previously unaffected areas. Any invading noxious weeds will be managed through FWP's Integrated Noxious Weed Management Plan.

FWP will meet the requirements of the Streamside Management Zone Law (MCA 77-5-301) that protects stream channels and banks and prohibits streamside activities that would diminish riparian habitat values.

There would be no short- or long-term effects to the overall geologic substrate.

Predicted Consequences of Alternative B
If the No Action Alternative were chosen, no disturbance to the current soil conditions would occur from tree removal activity.

4.1.2 Air & Noise
Predicted Consequences of Alternative A
Equipment used during tree removal would create noise, dust, and emissions. Project implementation would occur during the summer when visitation to the WMAs is minimal. Workers would be exposed to intermittent noise levels that would require the use of hearing protection. Local residents are not expected to be impacted by the noise. All generated noise and emissions are temporary and would cease at the completion of the tree removal activities. Burning will be conducted in cooperation with Montana DNRC and will follow all applicable laws for open burning and emissions.

Predicted Consequences of Alternative B
Ambient air quality and noise level would remain at the current levels if the No Action Alternative were chosen.

4.1.3 Water & Fisheries
Predicted Consequences of Alternative A
There may be short-term increase in erosion and sediment into streams with the removal of vegetation and soil-disturbing activities within the treatment areas, especially in those areas where large equipment would be used for commercial timber harvest. This would be minimized by the efforts described in 4.1.1. and in strict adherence to Montana's Forestry Best Management Practices and Streamside Management Zone law. Off-road motorized travel, necessary to access portions of the project area, would not intersect any surface waters or expose any soils covered by vegetation. Areas disturbed by this project would be reseeded with appropriate native grass/forb seed mixtures to reduce chances for erosion. Operations would be suspended when conditions are wet and the ground is more susceptible to disturbance.

Predicted Consequences of Alternative B
Under the No Action Alternative, there would be no temporary erosion or sedimentation caused by tree-removal activities.

4.1.4 Vegetation
Predicted Consequences of Alternative A
This project is expected to prevent loss of sagebrush, grassland, aspen and riparian habitat by removing advancing conifers. Some vegetation would be temporarily damaged from off-road ATV travel and from burning of slash piles. All vehicles and equipment would be washed before coming on-site to minimize the spread of noxious weed seed. Disturbed soils would also be reseeded with appropriate native grasses and forbs upon completion of the project. Weed treatment would adhere to the guidance of FWP's Integrated Noxious Weed Management Plan.

Predicted Consequences of Alternative B
Douglas fir and lodgepole pine succession would continue unless natural fire disturbance occurred. Conifer advancement would continue to fragment and replace sagebrush, grassland, aspen and riparian habitat.

4.1.5 Wildlife
Predicted Consequences of Alternative A
The proposed action would benefit elk, mule deer, moose, pronghorn, ruffed grouse, and numerous songbird- and small mammal species by minimizing the loss of sagebrush, grassland, aspen and riparian habitat and the forage, browse, and nesting structure they provide.

Project implementation would cause temporary disturbance to wildlife within the treatment areas. Disturbance will be minimized by limiting work to one area at a time and to time work to avoid critical nesting and calving periods. This disturbance is not expected to facilitate measurable short- or long-term negative impacts to populations. The project is expected to facilitate long-term benefits to all area wildlife through improved habitat conditions.

Predicted Consequences of Alternative B
Under this alternative, none of the benefits listed in Alternative A would be realized. The amount of year-round forage and browse available to ungulates would continue to decline. Advancing conifers will continue to reduce nesting and calving habitat available.

4.1.6 Aesthetics
Predicted Consequences of Alternative A
There would be temporary impacts to the visual quality of the project area post-treatment as lopped and scattered conifers break down and disturbed areas reseed. Areas where slash piles were burned would look charred until vegetation grows back in. Stumps would be cut to a maximum of 6 inches in height to lessen visual impacts.

Predicted Consequences of Alternative B
Under the No Action Alternative, there would be no visual impacts from felled trees that have been lopped and scattered or removed.

4.1.7 Recreation
Predicted Consequences of Alternative A
The project would be implemented during the summer and early fall when visitation to Mt. Haggin WMA is minimal. Recreationists may be impacted by project-associated traffic on access roads and tree-felling activity in the area. Work would be limited to weekdays and one area at a time to minimize impacts to recreationists and hunters during the archery season. Negative impacts would be temporary due to the relatively short duration of activity.

Predicted Consequences of Alternative B
The public's access to the WMA for recreational activities would not be impacted.

4.1.8 Cultural & Historic
Predicted Consequences of Alternative A
There are several historical structures located within the project area, primarily remnants of past logging and mining activities. No impacts to these resources are anticipated since tree cutting and removal activities would not occur near these sites. If cultural or historic artifacts are discovered during the implementation of this project, SHPO will be contacted to ensure those sites are investigated properly and protected from any potential threats resulting from this project.

Predicted Consequences of Alternative B
No significant ground disturbing activities will take place to affect cultural or historical artifacts

4.1.9 Hazards / Risks
Predicted Consequences of Alternative A
This project would create temporary hazards associated with tree falling. The threat of fire ignition caused by equipment would be mitigated by suspending the operation during times of high fire danger. Recreationists in the project area during the time of tree removal would have to be mindful of tree-felling operations to avoid injury. Burning of slash piles has inherent risks associated with wildfire if they are not contained. These risks will be mitigated by following DNRC's recommendations for safe burning.

Predicted Consequences of Alternative B
Under the No Action alternative, no hazards or risks would be assumed.

4.1.10 Community Resources

Predicted Consequences of Alternative A

A temporary increase in industrial traffic would be associated with this project. Logging trucks and equipment would be active in some of the treatment areas. The project will occur during summer and continue into fall, so visitors to the WMA and local residents could be inconvenienced by additional traffic from logging vehicles accessing and using the WMA's interior roads and Highway 274. Appropriate traffic and hazard signing would be used to minimize conflict during the implementation of the project.

Predicted Consequences of Alternative B

No impacts to community resources would occur.

5.0 MONITORING & LONG-TERM MANAGEMENT

FWP's Butte Area Wildlife Biologist and a Statewide Forester would oversee the implementation of this project. Regardless of implementation or no implementation, FWP would continue to implement ongoing noxious weed management across the proposed project areas. Photo points would be established to provide long-term site monitoring.

6.0 POTENTIAL LONG-TERM CONSEQUENCES

There is the potential for several positive long-term ecological consequences with the removal of conifers as proposed in this project. Sagebrush, grassland, aspen and riparian habitat would remain intact and possibly expand in size with the removal of competing conifer trees. This is expected to increase year-round forage and browse available to elk, mule deer, moose, pronghorn, and ruffed grouse. It is also expected to increase the amount of habitat available to numerous sagebrush and grassland-dependent avian and small mammal species.

There are no anticipated long-term negative consequences of the proposed action.

7.0 PUBLIC PARTICIPATION AND COLLABORATORS

7.1 Public Participation

The public will be notified that this EA is available for review and comment as follows:

- Direct mailing to adjacent landowners, Deer Lodge County, Silver Bow County, BLM, Forest Service, and other interested parties to ensure their knowledge of the proposed project
- Distribution via the FWP Butte Area Wildlife Biologist's email list of interested parties
- Two public notices each in *The Montana Standard* (Butte) and *The Anaconda Leader* (Anaconda).
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov*.

Copies of the draft EA would be available for public review at FWP Region 3 Headquarters and at the FWP Butte Area Resource Office. This level of public notice and participation is appropriate for a project of this scope.

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m. on December 5, 2017, and can be mailed to the address below:

Mt Haggin WMA Habitat Project #4
Montana Fish, Wildlife & Parks
1820 Meadowlark Lane
Butte, MT 59701

Or email comments to: vboccadori@mt.gov . Please put "EA Comment" in the subject line.

7.2 Collaborators - Other Agencies/Offices that Contributed to the EA

Montana Department of Fish, Wildlife & Parks: Wildlife, Fisheries, Legal
Montana State Historic Preservation Office

8.0 ANTICIPATED TIMELINE

Public Comment Period of EA: November 3 – December 5, 2017
Decision Notice: December 8, 2017
Initiation of Project: June 2018
Completion of Project: September 2021

9.0 DETERMINATION IF AN ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED

Based upon the above assessment, which has identified a limited number of minor impacts to the physical and human environment, an EIS in not required and an environmental assessment is the appropriate level of review.

10.0 EA PREPARER

Vanna Boccadori, FWP Wildlife Biologist, Butte, MT
Jason Parke, FWP Forester, Helena, MT

REFERENCES

Montana Fish, Wildlife & Parks Commission: Deer Management Policy, 1998.

Montana Fish, Wildlife & Parks: Statewide Elk Management Plan, 2005.

Montana Fish, Wildlife & Parks: Integrated Noxious Weed Management Plan, 2008.

Montana Fish, Wildlife, & Parks: State Wildlife Action Plan, 2015.

Newell, A.S. 1980. Historic resources study, Mt. Haggin Area, Deer Lodge County, Montana. Prepared for Montana Department of Fish, Wildlife, and Parks, Bozeman, MT.

Wood, D. M. 1990. Mt. Haggin Game Management Area, Final Report. Prepared for Montana Department of Fish, Wildlife & Parks, Butte, MT.